

Western Ecological Research Center http://www.werc.usgs.gov

Redwood Field Station

Northwestern California is home to the coast redwood, the world's tallest tree, which can reach a height of more than 365 feet. Virgin redwood forests once covered 2,000,000 acres, from Monterey to southern Oregon. Today, less than 90,000 acres remain uncut, and half of all old-growth redwood forests are protected within Redwood National and State Parks and the Headwaters Forest. Past timber harvest and road construction on steep hillslopes on surrounding lands have caused forest fragmentation and accelerated erosion, contributing to destruction of fish spawning and rearing habitat, loss of streamside shade, and increased stream temperatures.

The Redwood Field Station is located in coastal Northern California, and most research is conducted in redwood-dominated watersheds. Station scientists conduct research on issues related to timber harvest, effects of past watershed disturbances, watershed restoration, and recovery of disturbed ecosystems. The study results are applicable to restoration efforts in disturbed land-scapes throughout the Pacific Northwest. The field station provides technical assistance to the National Park Service, U.S. Fish and Wildlife Service, Bureau of Land Management, and other client agencies on developing inventory and monitoring plans, hillslope and channel stability assessments, and other issues.

The Redwood Field Station is currently involved in studies concerning restoration of the physical and biological landscapes in Redwood National and State Parks. The studies include inventory and monitoring of erosion, sediment transport, and stream temperatures; evaluating the effectiveness of various strategies for watershed restoration; assessing stream recovery following watershed restoration; and determining the influence of timber harvest and floods on riparian areas.



Science Expertise

Mary Ann Madej, Ph.D., Research Geologist, Adjunct Professor, Humboldt State University

- Geomorphology
- Watershed restoration
- Erosion/sediment transport
- Ecological monitoring
- · Riparian ecology
- Disturbance ecology

For more information, contact:

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